

**TESTIMONY OF GARY GERO, PRESIDENT OF THE
CALIFORNIA CLIMATE ACTION REGISTRY**

**BEFORE THE HOUSE ENERGY AND COMMERCE COMMITTEE
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT
UNITED STATES HOUSE OF REPRESENTATIVES**

**MAKING OFFSETS WORK:
ENSURING THE ENVIRONMENTAL INTEGRITY
OF GREENHOUSE GAS EMISSION REDUCTIONS
IN A FUNCTIONING OFFSETS PROGRAM**

MARCH 5, 2009

Executive Summary

The California Climate Action Registry has applied its recognized expertise in rigorous and accurate greenhouse gas (GHG) accounting to the quantification of GHG emission reductions through its national Climate Action Reserve™ (“Reserve”) program. The Reserve develops and implements standardized, performance-based project protocols, actively manages an independent, third-party verification program, and oversees a robust registration, serialization, and tracking system to ensure ownership and prevent double counting of emission reductions. The Reserve provides stringent criteria and sound mechanisms to ensure that GHG emission reduction projects meet the key tests of being real, permanent, additional, verifiable, and enforceable, and its activities are guided by the key principles of accuracy, conservativeness, transparency, and practicality. As a result of the credibility of its efforts, the states of California and Pennsylvania have recognized the Reserve for the purposes of quantifying early voluntary actions within those states, and several environmental organizations have expressed their support for the Reserve’s activities. The Climate Action Reserve provides real-world experience that demonstrates how a regulatory quality GHG emission offsets program can be designed and implemented.

The California Climate Action Registry

The California Climate Action Registry (CCAR) is an independent 501(c)(3) nonprofit organization headquartered in Los Angeles, California that is dedicated to addressing the serious challenge of climate change through the accurate quantification and public reporting of GHG emission inventories and emission reduction projects, and by promoting activities to reduce such emissions. Originally created by state legislation in California in 2001¹ to focus on creating standards for the calculation of baseline emission inventories, CCAR is a widely recognized expert in the development and implementation of GHG quantification standards and protocols.

Over the past two years, CCAR has applied this expertise across the United States to ensure the environmental integrity of GHG emission offsets through its Climate Action Reserve program. It has done this by working with a broad range of stakeholder interests to set strong and credible standards for quantifying emission reductions, creating a strong program to accredit and oversee verifiers, and establishing a public registry to serialize, track, and retire emission reductions. The Climate Action Reserve's emission reduction credits are known as Climate Reserve TonnesTM (CRTs or "carrots") and are widely regarded as among the highest quality in the voluntary carbon market today. Each CRT represents one metric ton of CO₂-equivalent (CO₂e) emission reductions or removals from the atmosphere. To avoid the potential for conflicts of interest, CCAR does not fund or otherwise develop emission reduction projects, nor does it serve as an exchange for offset credits or otherwise engage in financial transactions concerning such credits.

In recognition of the credibility of its efforts, the State of California Air Resources Board has adopted five of the Reserve's protocols for the quantification of early voluntary actions under AB32² and the State of Pennsylvania has stated that it will recognize early voluntary actions taken pursuant to the Reserve's protocols³. Further, in keeping with its goal of engaging all stakeholders, the Board of Directors of the California Climate Action Registry is comprised of representatives from government agencies, businesses, and environmental organizations.

Role of Offsets in Cap and Trade Programs

The California Climate Action Registry is not an advocacy organization and, as such, does not take policy positions. Nevertheless, CCAR recognizes that offsets have a role in both the voluntary and regulatory arenas and believes that to the extent that offsets are part of such systems, the associated emission reductions must be credible. CCAR also recognizes that the fundamental role of offsets is to provide economic efficiency and cost containment within regulatory cap and trade programs by obtaining emission reductions at a lower cost than would be possible within the capped system. Offsets can also serve to obtain emission reductions in sectors not well suited to regulation or capped, promote the use of new technologies, and provide co-benefits not related to the reduction of GHG emissions. Finally, offsets can serve as a means of allowing entities that are covered under a cap sufficient time to plan and implement onsite emission reductions.

Today, the only operating cap and trade program in the U.S. is the Regional Greenhouse Gas Initiative (RGGI) that covers electric utility emissions in the Northeast U.S.⁴ Additionally, the framework details for broader California and Western Climate Initiative⁵ (WCI) programs have been released and are under consideration, and the initial framework for the Midwestern Greenhouse Gas Reduction Accord (MGGA) has been announced. In each of these instances, a standardized, performance-based approach to crediting offset reductions is being implemented or recommended.

In line with this approach, both RGGI and the WCI have developed a list of priority offset project types for inclusion in their programs. Project types identified by both programs include afforestation; methane capture and destruction from livestock operations; and methane capture and destruction from landfills. RGGI has also developed protocols for projects that reduce the leakage of SF₆ from electric utility applications and for projects that improve end-use thermal

energy efficiency. The WCI has identified other kinds of forestry and sequestration projects as a priority, along with wastewater management projects.

The Climate Action Reserve has developed and implemented performance-based protocols for most of these sectors and is actively assessing the others. To date, the Reserve has adopted performance-based protocols for reforestation, conservation-based forest management, avoided forest conversion, urban forestry, and methane capture and combustion for livestock operations and for landfills.

Ensuring Environmental Integrity – Setting Standards

An offset represents the reduction, removal, or avoidance of GHG emissions from a specific project that is used to compensate for GHG emissions occurring elsewhere.⁶ Because offsets represent something that does not exist (the reduction or removal of emissions from the atmosphere), they are intangible. Therefore, to ensure their integrity it is necessary to determine their ability to meet a set of prescribed criteria which have been largely defined in the field as follows⁷:

Real – Quantified GHG reductions must represent actual emission reductions that have occurred (not merely be projected to occur) and not be the artifacts of incomplete or inaccurate accounting.

Permanent – GHG reductions (or removals, in the case of sequestration) should be permanently removed from the atmosphere, and/or be backed by replacement mechanisms if they are re-emitted to the atmosphere (i.e., are “reversed”).

Surplus – GHG reductions should be the result of a response to the existence of a market for such reductions; that is, they should not be reductions that would have happened anyway (i.e., they are “additional”).

Verifiable – GHG reductions should result from projects that can be accurately monitored and verified.

Enforceable – GHG reductions should be supported by legal instruments that define their creation, provide for transparency, and ensure exclusive ownership.

The key challenge to ensuring the integrity of GHG offsets is to establish and administer tests to determine the ability of an emissions reduction project to satisfy the above criteria. Such tests, or standards, can be distinguished into three categories as follows⁸:

Accounting Standards – These are standards related to the actual quantification of GHG reductions. Accounting standards specify methods for defining quantification boundaries, estimating baseline emissions, and correcting for unintended changes in emissions (i.e., “leakage”). Accounting standards also encompass methods for demonstrating that a project would not have happened anyway (i.e., “additionality”). Finally, they may specify methods for treating non-permanent GHG removals on equal footing with permanent GHG reductions.

Accounting standards are a first-order requirement for ensuring that “a ton is a ton” and ensure that offsets are **real, surplus, and permanent**. Prescriptive requirements for these are incorporated into the Project Reporting Protocols adopted by the Climate Action Reserve for each project type.

Procedural and Technical Standards – These are standards related to the validation, monitoring, and verification of offset projects, as well as the certification and crediting of GHG reductions. Procedural and technical standards ensure that offsets are **verifiable**. Prescriptive requirements for these are incorporated into the Reserve’s Project Verification Protocols that serve as accompanying documents for each Project Reporting Protocol, and are also described in the Climate Action Reserve Program Manual⁹.

Contractual Standards – These are standards for the establishment and transfer of property rights related to GHG reductions, and for information disclosure, and can include terms for compensation where GHG removals are reversed. Contractual standards are necessary to avoid double-issuance and double-counting of GHG reductions, and ensure that offsets are **enforceable**. The Climate Action Reserve incorporates such contractual standards into its project protocols, as well as in its Program Manual, Terms of Use, and Operating Procedures¹⁰. It also creates a unique serial number for every ton of emission reductions, or CRT, so that ownership can be clearly established and reductions cannot be double counted or sold.

Guiding Principles for the Climate Action Reserve

The Climate Action Reserve provides each of the accounting, technical, and contractual standards described above to ensure that its program is comprehensive. In administering these key elements, we are guided by several key principles. Indeed, since our inception in 2001, CCAR has developed and implemented its programs with the recognition that the emission inventory and emission reductions data that it registers must meet rigorous regulatory-grade standards to ensure that such data are recognized by the State of California. This goal has been met with the adoption of the California Global Warming Solutions Act that specifically requires the Air Resources Board to incorporate the standards and protocols adopted by CCAR into the state’s regulatory program “to the maximum extent feasible.”¹¹ Therefore, in crafting its quantification, verification, and reporting protocols, several key principles have consistently guided its decision making. These are as follows:

Accuracy – Ensuring that baseline conditions and emission reductions are accurately estimated and quantified is at the core of providing credible GHG offsets. The Climate Action Reserve strives for a high degree of accuracy in the measurements, calculations, and estimates of project activities to reduce uncertainty as much as is practical. This accuracy is achieved by considering a variety of factors, including setting appropriate accounting boundaries to ensure all relevant sources (and sinks) of emissions are included, relying on best available science for quantifying or modeling emissions, and prescribing the use of high-quality monitoring equipment.

Conservativeness – Despite best efforts, or for reasons of practicality, there are instances in which there is a degree of uncertainty with regard to the quantification of emission reductions. In such cases, the guiding principle for the Reserve is to rely on conservativeness to ensure that

the GHG emission reductions are not overestimated. By avoiding overestimation, the Reserve ensures that offset credits (“Climate Reserve Tonnes or CRTs”) are only issued for real reductions.

Transparency – A hallmark of the work of CCAR has been and continues to be the open and transparent manner in which it conducts all of its activities to ensure that outside observers can themselves gauge the accuracy and credibility of our efforts. This principle guides the development and implementation of our protocols and associated processes, and continues through project verification and registration. From the unique serial number assigned to every ton of emission reductions, or CRT, any member of the public can trace the project documents, verification reports, underlying protocols, and protocol source documents that led to the registration of that emission reduction.

Practicality – Notwithstanding our other guiding principles, the Reserve recognizes that for a program to function, it must not simply be an academic exercise, but must instead incorporate real common-sense and practicality. Therefore, where further increasing accuracy, reducing uncertainty, or enhancing transparency is not practical or necessary to ensure a high degree of program credibility and rigor, it is not automatically pursued. Similarly, we seek to prevent or remove potential programmatic barriers to the implementation of emission reduction projects when doing so can be achieved without compromising program credibility.

How the Climate Action Reserve Addresses Key Accounting Criteria

Additionality

The concept of a project being “additional,” that is that it would not have occurred otherwise except for the incentive provided by the existence of a GHG offset credit market, is central to ensuring the credibility of an offsets program, though it is fraught with potential complexities and challenges. CCAR began writing its first project protocol in 2004 and, in so doing, directly faced this challenge by evaluating the range of potential approaches. Two distinct approaches were available for consideration: namely, the project-specific assessments conducted under the Clean Development Mechanism (CDM)¹² program enabled by the Kyoto Protocol and a broader, standardized, performance-based approach to whole project categories that has been promoted by the U.S. Environmental Protection Agency, most recently under its Climate Leaders program¹³.

In evaluating these approaches, CCAR recognized that project-specific assessments had the potential to introduce a high degree of subjectivity into determining the eligibility and quantification of each project, as well as create uncertainty for investors and a significant administrative burden. In particular, the CDM program relies in part on project-specific financial additionality tests that are meant to determine whether it is the value of offset credits that makes a project financially viable. Doing so requires an evaluation of the financial circumstances of the project proponent, their cost of funds (including opportunity costs), their internal rate of return, and other non-environmental considerations which vary from project to project and which are potentially malleable.

As an alternative to this approach, the concept of a performance-based standard was developed in which an assessment of a category of projects is conducted to determine what degree of

emission reduction performance can be reasonably assumed to be additional. Such performance-based standards may specify an emissions rate or a particular technology that serves as a threshold for eligibility and that on its own is indicative of better than “business as usual” circumstances. In this way, the performance standard uses proxy tests for determining additionality, rather than project-specific financial and other assessments. The performance-based approach results in clear and consistent rules, thereby significantly reducing subjectivity in determining project additionality and eligibility.

Baseline Determination

Once a project is determined to be eligible and additional, it is necessary to make a determination about the baseline from which the project reductions will be quantified. To do this, the Reserve also prescribes a standardized approach rather than a project-specific analysis. Similar to the performance-based approach to additionality, the evaluation of baseline conditions is conducted on a project-type basis using standardized assumptions and emission factors to calculate a default baseline.

This standardized approach differs from project-specific assessments, which attempt to demonstrate for each individual project what would have occurred in the absence of that project. The standardized approach considers the sector as a whole and makes a determination as to what are future “business as usual” circumstances. In setting such baselines, the Reserve recognizes the inherent uncertainty of predicting a future “business as usual” counterfactual scenario, and so fully applies the guiding principle of conservativeness here to ensure projects are not over credited.

Standardized approaches reduce uncertainty about how many emission reductions to expect, and increase transparency for both project developers and outside observers. Furthermore, by incorporating some project-specific information and data, it is possible to increase accuracy without sacrificing the certainty and objectivity of the performance-based approach. In practice, the Reserve has employed performance-based approaches that do, in fact, consider some project-specific variables, but only to the extent that doing so sufficiently increases accuracy without introducing ambiguity or undue administrative complexity. Indeed, as a nonprofit organization, it is important that the program we administer in this regard only be as complex as is necessary to retain rigor and credibility, but no more so.

Permanence

To be effective in offsetting the actual emissions of greenhouse gases into the atmosphere, a GHG emission reduction (or removal in the case of a sequestration activity) must permanently remain out of the atmosphere, otherwise the benefit to the atmosphere and the environment is lost. In general, this is not a concern for direct emission reduction activities like methane destruction, since once destroyed the process is irreversible.

Sequestration activities, however, are the removal of carbon dioxide from the atmosphere and fixing the carbon through a biological process, such as in the generation of tree fiber. While sequestration processes are well understood and the associated carbon storage can be quantified with certainty, these processes have the potential to be reversed, such as when a tree is lost to fire or disease. In such cases, the stored carbon in the tree is returned to the atmosphere and its offset

value is nullified. Recognizing this potential does not preclude sequestration activities from participating in an offsets program if adequate mechanisms are instituted to guarantee or insure the permanence of the removal.

Currently, forest-based offset credits in the Climate Action Reserve are guaranteed through the imposition of replacement requirements between the private owner and purchaser of such offsets. However, we re-formed a workgroup to update our Forest Project Protocols in November 2007 to address this and other issues on a system-wide basis. As a result of this effort, the next iteration of our forest protocols (which are scheduled for adoption in May 2009) will include the creation of a three-stop process to guarantee the permanence of these offset credits.

The first step in this process is the imposition of an annual reporting requirement that will ensure that any reversals that do occur are quickly identified and managed. Second, project proponents will be required to enter into an enforceable recorded agreement with the Reserve that will obligate them and any subsequent landowners to compensate the Reserve for any intentional reversals (such as from harvesting or land conversion) that occur. Finally and most significantly, we will create an insurance pool from which unintentional reversals (such as those due to fire, disease, pests, or storm damage) will be automatically compensated from within our Reserve program. To populate the insurance pool, the Reserve will require that a risk assessment for the potential of reversals be conducted and that projects contribute credits to the pool based on their levels of risk. Functioning very much as like traditional insurance, the Reserve will administer the pool and use it to compensate for any reversals that occur and will itself be re-insured to ensure overall system integrity.

Leakage

Accounting for “leakage” is important for accurately estimating net emission reductions and ensuring that credited reductions are real. Leakage is the idea that the reduction of emissions from a project activity may result in an increase in emissions elsewhere (thus the emission reductions are “leaked” back into the atmosphere). A prime example of this concept is in the area of forestry where the reduction in harvesting of a forest project does not diminish the overall demand for wood products and to meet that demand another forest owner increases his or her harvest rates to meet that demand. The Reserve accounts for the potential for leakage to occur in all of its protocols by conducting a leakage assessment and, where such potential exists, requiring that the quantification of emission reductions or removals reflect and account for this potential.

Transparency in the Climate Action Reserve

Perhaps the most integral element of ensuring the credibility of any program is to make sure that its standards, processes, and operations are as open and transparent as possible to allow the public to assess for themselves its integrity. The CCAR has deeply and fundamentally incorporated transparency into every element of the Climate Action Reserve program, starting with how protocols are developed through how projects are verified and registered, and how CRTs are issued, tracked, and retired within the system.

The Reserve's protocol development process is based on and largely mirrors the processes used by state and federal regulatory agencies in rulemaking. Most protocols start with the preparation of an Issues Paper that evaluates the feasibility and desirability of developing a protocol (or set of protocols) for a particular project type. It assesses possible issues with developing a standardized protocol for the project type, including an evaluation of potential approaches to GHG emissions quantification; exploration of options for defining eligible project activities; evaluation of approaches to setting project boundaries; and assessment of the availability of datasets and other pertinent information. Issues papers are prepared by researching existing sector methodologies and datasets and consulting sector experts.

Upon their completion, these papers are posted to the Reserve's website and made available to the public for review. Project types that appear to hold promise as GHG emission reduction activities and that lend themselves to the use of performance-based standards are then moved forward for broader stakeholder engagement and possible protocol development.

The first step in this process is to convene a public stakeholder workshop at which the project type and the key challenges to protocol development are raised. These workshops are free, open to the public, and widely announced. For those project types that the Reserve intends to craft a protocol, a voluntary multi-stakeholder workgroup is established. It is comprised of representatives of industry, government agencies, environmental organizations, and academia. Such workgroups are large enough to ensure broad representation but small enough to allow for dialogue and consensus-building. The Reserve staff manage these workgroups in the development of a draft project protocol.

Once a draft protocol is completed, the Reserve engages expert stakeholders and the public starting with a public workshop at which the draft protocol is described in detail and ideas and comments are solicited. Targeted questions may be asked and guidance or recommendations on specific topics within the protocol may be solicited. Such workshops initiate a formal public review and comment period of at least thirty days that is very similar to a regulatory notice and comment process. At the conclusion of the comment period, all comments received are posted to the Reserve website and are compiled into a single document. The Reserve staff, together with the workgroup members, review these comments and modify the draft protocol as appropriate and prepare written responses.

A final draft protocol that incorporates expert and public comments and that includes all comments and responses is then scheduled for public adoption by the governing board of the California Climate Action Registry which, unlike most nonprofit boards, meets in open, public sessions and provides opportunity for public comment. Finally, once adopted, all protocols are publicly available and the Reserve continues to solicit public comment and feedback as they are put into actual use. As practical experience is gained and as the state of science progresses, the protocols are revised from time to time using this same multi-stakeholder process.

How the Reserve Ensures Verifiability and Enforceability

Verification

Standards or protocols, no matter how rigorous and transparent they may be, are only effective if they are strenuously and consistently enforced. To ensure that the Reserve's protocols are actually being followed in the development and implementation of emission reduction projects, the Reserve provides a Project Verification Protocol for each of its protocol types that lays out our prescriptive requirements for how verification activities are to be conducted.

To verify project activities, the Reserve relies on independent, third-party verification bodies that it trains, accredits, and assiduously oversees. The Reserve is now working with the American National Standards Institute (ANSI) to assist with its verification program and to ensure that Reserve-accredited verification bodies (and their individual verifiers) are International Standards Organization (ISO) compliant. ANSI ensures that verification bodies are approved per ISO and the Reserve ensures that each demonstrates competency in each project type.

In order to verify projects listed or registered with the Reserve, an individual verifier must be employed by or subcontracted to an accredited verification body and be properly trained to verify projects of the appropriate type. The Reserve has developed and implemented a training curriculum for GHG emission reduction project accounting and for each of its project protocols. Verifiers must demonstrate competency by successfully passing an examination in order to be accredited by the Reserve and not all verifiers are approved to verify all project types. Similarly, the verification body itself must be accredited and eligible to conduct verifications for specific project types.

Once trained and accredited, verifiers and verification bodies receive direct oversight by the Reserve and ANSI in three distinct ways: reviewing conflict of interest, conducting random field and desk audits of their verification activities, and reviewing and assessing verification opinions to ensure accuracy.

For every project that it seeks to verify, the verification body is first required to submit a Conflict of Interest disclosure document to the Reserve that details any pre-existing contractual relationships between the verification body and the project developer. The Reserve carefully assesses these relationships and rates their potential to create a conflict of interest. Low risk conflicts are required to be disclosed and medium risk conflicts must be mitigated. Verification bodies with a high risk of conflict of interest for a project are precluded from conducting verification of such projects.

Additionally, to ensure that verification activities are being properly undertaken in conformance with the Reserve's Project Verification Protocols, the Reserve and ANSI conduct regular random inspections and audits of verification activities. The Reserve also carefully reviews every verification opinion submitted to ensure its conformity with the Verification Protocol and its completeness and accuracy in the quantification of the project's emission reductions. Only once the Reserve is satisfied that a project has been properly verified does it register the project and issue CRTs.

Enforceability

The Reserve imposes a number of contractual and other obligations on program participants to ensure that its system retains integrity and that ownership of emission reductions is transparent.

The Reserve's approach to compensating for reversals of reductions from sequestration projects is discussed above. Enforceability also relates, however, to the legal enforceability of claimed emission reductions.

As part of submittal of a project to the Reserve, project developers must submit a legally-enforceable Attestation of Title form¹⁴ indicating that they have exclusive rights to the GHG reductions or removals associated with the project and for which the Reserve will issue CRTs. The Attestation of Title stipulates that GHG reductions or removals for which CRTs are issued will not be registered on another system or claimed as an offset outside of the Reserve. These documents are part of the public record for each project and are used to prevent the double counting or double registration of any project. Additionally, participants in the Reserve program are required to sign and submit a legally-enforceable Terms of Use document that details the warranties, representations, and covenants of the program.

A key element to ensuring that ownership of CRTs is clear and enforceable is through the robust registration and tracking system that the Reserve has implemented. For verified and registered projects, this system issues a unique serial number for each CRT that provides clear information about the emission reduction type, location, and vintage. The Reserve system then allows owners to transfer specific serial numbered CRTs to purchasers or to retire them. This web-based system includes advanced security features such as encryption and electronic auditing to prevent fraud or abuse, and is built on a robust platform that has handled more than a billion similar transactions in other environmental commodity markets without error.

Finally, the Reserve system is open and transparent, allowing free public access to view all account holders, projects and project documentation; research serialized CRTs; and generate system reports. This openness provides a public check on the activities within the system to further prevent fraudulent claims or other system abuses.

Two Examples of How the Climate Action Reserve Operates

As described, the Reserve has adopted 6 project protocols and is currently working on several other project types and on extending the use of our protocols into Mexico. We continue to train, accredit and oversee verification bodies, and we operate a robust project offset registration and tracking system. To date, we have registered 6 projects representing the issuance of over 600,000 metric tons of CO₂-e emission reductions as CRTs. We have 36 additional projects that have been submitted to us from 18 U.S. states, and we expect to have registered more than 1.5 million CRTs by the end of 2009 and nearly 4 million by the end of 2010. To better understand how the system operates, two examples are provided below that describe the establishment of a performance-based threshold and how we ensure broad stakeholder engagement.

Determining a Performance-Based Threshold

In the development of a protocol for the capture and combustion of methane from livestock waste management operations, the Reserve evaluated the establishment of a performance-based threshold for determining the additionality for this project type. The analysis to establish a Performance Standard for the Manure Management Project Protocol was undertaken by expert

technical consultants at the end of 2006. The analysis culminated in a paper that provided a Performance Standard recommendation to support the Reserve's protocol development process.

The purpose of a Performance Standard is to establish a threshold that is significantly better than average GHG production for a specified service, which, if met or exceeded by a project developer, satisfies the criterion of "additionality." The California Registry's project protocol focuses on the following direct emission reduction activity: capturing and combusting methane from managing livestock manure. Therefore, in this case the methane emissions correspond to GHG production, and manure treatment/storage correspond to the specified service.

The analysis to establish the Performance Standard evaluated U.S. and California-specific data on dairy and swine manure management systems. Based on this analysis, it was determined that such systems are not required by regulation and that, in fact, are used in fewer than 0.10% of swine and dairy operations in the U.S.¹⁵ The overwhelming absence of such systems suggests that very significant financial and technical barriers exist to their implementation, and thus can be inferred that the implementation of such technology, if it is to occur at all, is attributable to the financial incentives provided by a GHG market. That is, implementation of this high-performing technology is in itself deemed to be additional to "business as usual" circumstances and, therefore, qualifies under the Climate Action Reserve program as an eligible project activity.

Engaging Stakeholders in the Protocol Development Process

In October 2007, California Air Resources Board adopted the Reserve's Forest Protocol for the purposes of recognizing early voluntary actions under AB32¹⁶. In taking this action, the Board requested that CCAR reconvene a forest protocol workgroup to expand the types of forest ownership lands on which the protocol could be applied. At the same time, the Reserve sought to expand the protocol for use throughout the U.S. and to update the science and related components of the protocol. Thus, a Forest Project Protocol Workgroup was convened in November 2007 to guide this update process. The workgroup was comprised representatives of state and federal government representatives, including both forestry and environmental agencies, small and large private forest landowners including land trusts and timber companies, environmental organizations, academics with expertise in forestry, and other experts.¹⁷

At the outset of this effort, the Reserve held a public workshop to solicit stakeholder input on potential updates needed for the Forest Protocol and to focus the efforts of the workgroup. Subsequent to this workshop, the workgroup established a work program and committed to meeting every three weeks in day-long sessions to discuss and seek consensus on both technical and policy issues. These workgroup meetings were open to the public.

The workgroup also established committees to cover specific topic areas and these committees met separately between workgroup sessions. Over the course of their 15-month process, the workgroup held three public workshops to update the public on the progress of drafting the protocol and to solicit additional comment on the direction that the workgroup was taking. This process resulted in a draft protocol document that was released in December 2008 for public review and comment.

The Reserve received 40 sets of public comments demonstrating broad public engagement in this effort, and these are posted on the Reserve website. These comments have been categorized and compiled into a single document and every comment will receive a written response that will be part of the public record for the protocol. The Reserve now expects to release its final draft to the public by April 2009 for additional review and comment, and to adopt the protocol by the end of May 2009.

This time- and resource-intensive process is vital to building consensus, ensuring transparency, and establishing a credible protocol that is broadly accepted as best practice for quantifying the GHG benefits of forest project activities.

Conclusion

As the United States contemplates legislation to address the serious threat of climate change, one of the approaches being given serious consideration is a cap and trade program in which offsets are included. The experience of the Climate Action Reserve has shown that it is possible to design and implement a credible offsets program, but doing so requires that careful attention be paid to the program's structure and individual program elements to establish and maintain program integrity. These elements include setting rigorous program standards, creating and overseeing a strong verification and verifier oversight program, and implementing a transparent yet secure registry system.

The Climate Action Reserve believes that existing credible, compliance-grade efforts can inform and be part of a regulatory program by providing the infrastructure necessary for a regulatory program to be quickly implemented. Indeed, rather than expend significant time and resources to reinvent existing infrastructure, it may be more effective, efficient, and appropriate for regulatory agencies to instead provide an accreditation and oversight role for credible programs and provide a mechanism for those programs to support the regulatory system.

¹ California Senate Bill 1771 (Sher, Chapter 1018, Statutes of 2000) as modified and implemented by California Senate Bill 571 (Sher, Chapter 769, Statutes of 2001). These can be found here: <http://www.climateregistry.org/resources/docs/legislation/SB1771.pdf> and here: <http://www.climateregistry.org/resources/docs/legislation/SB527.pdf>.

² For adoption of the Forest Protocol, see agenda item 07-10-03 on ARB agenda for October 25, 2007 here: <http://www.arb.ca.gov/board/ma/2007/ma102507.htm>. For Livestock Waste Management and Urban Forestry, see agenda item 08-8-5 on ARB agenda for August 8, 2008 here: <http://www.arb.ca.gov/board/ma/2008/ma092508.htm>. The forest protocol comprises three distinct project types (reforestation, improved forest management, and avoided forest conversion) and is considered to be three separate protocols in this context.

³ See October 2008 statement of the State of Pennsylvania Department of Environmental Protection concurring with recommendations of the Climate Change Advisory Committee to recognize the Climate Action Reserve here: <http://www.depweb.state.pa.us/energy/cwp/view.asp?a=1532&q=542258>

⁴ For information see: <http://www.rggi.org/home>

⁵ For information on the California Scoping Plan see: <http://www.arb.ca.gov/cc/scopingplan/document/psp.pdf> and for the Western Climate Initiative, see: <http://www.westernclimateinitiative.org/>

⁶ "Ensuring Offset Quality: Integrating High Quality Greenhouse Gas Offsets Into North American Cap-and-Trade Policy," July 2008, Offset Quality Initiative, at http://www.offsetqualityinitiative.org/pdfs/OQI_Ensuring_Offset_Quality_7_08.pdf.

⁷ The following discussion and footnote are adapted from “Linking Markets for GHG Reductions: Can it be Done?”, March 2007, Derik Broekhoff, Senior Associate, World Resources Institute. The concept of emission offsets originated under the “New Source Review” program established by the United States Clean Air Act of 1977. Under this program, offsets are required to be “real, creditable, quantifiable, permanent, and federally enforceable.” These basic criteria have been modified and adopted in general form under a variety of other offset programs, including programs for carbon offsets. The “surplus” criterion is generally added to distinguish offset reductions from reductions that would occur for other reasons and in the GHG context is usually termed as “additional”. The criteria cited in this testimony are the most frequently cited and are, for example, included in the California Climate Change Scoping Plan as adopted by the State of California Air Resources Board on December 11, 2008 which is here: <http://www.arb.ca.gov/cc/scopingplan/document/psp.pdf>.

⁸ Adapted from “Testimony of Derik Broekhoff, Senior Associate, World Resources Institute, Testimony to the House Select Committee on Energy Independence and Global Warming, U.S. House of Representatives, July 18, 2007”

⁹ The Program Manual is located here:

http://www.climateregistry.org/resources/docs/reserve/Climate_Action_Reserve_Program_Manual_Feb_23_2009.pdf

¹⁰ The Terms of Use are located here: <http://www.climateregistry.org/resources/docs/offsets/ccar-terms-of-use-07.14.08.pdf> and the Operating Procedures may be found here: <http://www.climateregistry.org/resources/docs/offsets/operatingprocedures.pdf>

¹¹ Assembly Bill 32, the Global Warming Solutions Act of 2006 (Núñez, Chapter 488, Statutes of 2006) which is found here: http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf.

¹² For information on CDM see <http://cdm.unfccc.int/index.html> and for a discussion on performance-based approaches, see “Expanding Global Emissions Trading: Prospects for Standardized Carbon Offset Crediting,” International Emissions Trading Association, prepared by Derik Broekhoff, World Resources Institute, November 15, 2007

¹³ For information on the U.S. EPA Climate Leaders program see <http://www.epa.gov/climateleaders/index.html>

¹⁴ Form is located here: <http://www.climateregistry.org/resources/docs/offsets/Project-registration/attestation-of-title.pdf> and completed forms are made public through the Reserve.

¹⁵ Summary information from the study can be found in Appendix C of the Protocol here:

<http://www.climateregistry.org/resources/docs/protocols/project/livestock/CCARLivestockProjectReportingProtocol2.1.pdf>

¹⁶ See agenda item 07-10-03 on ARB agenda for October 25, 2007 here: <http://www.arb.ca.gov/board/ma/2007/ma102507.htm>

¹⁷ The workgroup is comprised of representatives from: U.S. Forest Service, U.S. EPA, California Air Resources Board, California Department of Forestry and Fire, California State Parks, California Forestry Association, Sierra Pacific Industries, Green Diamond Resources, Beaty & Associates, Pacific Forest Trust, Scientific Certification Systems, Winrock International, World Resources Institute, Environmental Defense Fund, The Nature Conservancy, and the University of California.